

CLAIMS

1. A machine for producing containers made of a thermoplastic by stretching and blow molding preforms,
5 this machine comprising a continuously rotating turntable (1) supporting at least one molding device (4) comprising an openable mold (5) and a stretch rod (8) which can be sequentially moved, by support and driving means (9), along the axis (3) of the mold so as
10 to stretch the preform during the container production operation,

characterized in that the means (9) for supporting and driving the stretch rod (8) are mechanical means which comprise:

15 - power takeoff means (10) functionally associated with said turntable (1) and able to generate, from the continuous unidirectional rotation of the turntable, two rotary movements of given angular amplitudes of a rocker (11) occurring at two
20 respective predetermined angular locations of the circular route of the turntable, and
- movement conversion means (12) able to convert said two rotary movements of given angular amplitudes of the rocker into two alternately descending and ascending opposite linear movements of a drive member (13) along a route substantially parallel to the axis of the mold, said drive member (13) being connected to the stretch rod (8).

30 2. The machine as claimed in claim 1, characterized in that the power takeoff means (10) comprise:

35 - fixed cam means (14) extending at least in a circular arc and coaxial with the turntable, having at least two bosses (15, 16) at the respective predetermined locations for controlling the movements of the stretch rod (8), and
- a rocker (11) with at least one idler roller supported in a freely rotating manner about a

vertical axis (17) by the turntable (1) and driven thereby along the cam means, the rocker (11) being able to be rotated over a predetermined angular range when the idler roller passes each boss (15, 16) of the cam means.

5 3. The machine as claimed in claim 2, characterized in that:

- 10 - the cam means (14) comprise two superimposed fixed cams (14A, 14B), these cams comprising, for said each predetermined location, two respective bosses (15A, 16A; 15B, 16B) arranged angularly offset to one another, and
- 15 - the rocker (11) comprises two pairs of two idler rollers (18A, 18B), vertically offset to one another for respectively cooperating with said two cams (14A, 14B), this rocker (11) comprising two arms (19A, 19B) in a cross integral with each other and supporting said rollers at their respective ends, the axis (17) of rotation of the rocker coinciding with the intersection of said two arms,
- 20 whereby, at each of said predetermined locations, the rocker, by passing over the two successive bosses of the cam means, rotates by 180°.

25 4. The machine as claimed in either of claims 2 and 3, characterized in that the fixed cam means are circular.

30 5. The machine as claimed in either of claims 3 and 4, characterized in that said cams (14A, 14B) comprise respective cam surfaces which are cylinders of revolution and coaxial with the axis of the turntable 35 and in that the rocker (11) is moved within the cylindrical space bounded by the cams.

6. The machine as claimed in any one of claims 2 to 5, characterized in that the movement conversion means (12) comprise:

- a caliper (25) formed from two arms (23, 24) hinged freely by one of their respective ends, these two arms (23, 24) being arranged in a substantially vertical plane, the first of these arms (23) having its other end hinged freely at a fixed point (26) of the turntable (1) and the second of these arms (24) having its other end hinged on a slide (13) mounted on a guide (27) parallel to the mold axis, said slide (13) supporting said stretch rod (8),
- 15 - and a drive rod (34) having a first of its ends made integral, via a rotary hinge with three degrees of freedom, with a rotary arm (33) integral with the axis of the rocker (11) and having its other end connected via a rotary hinge with three degrees of freedom to said first arm (23) of said caliper.